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LEADING ARTICLES

CHRONIC CONSTIPATION AND ITS TREATMENT.

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CHICAGO, ILL.

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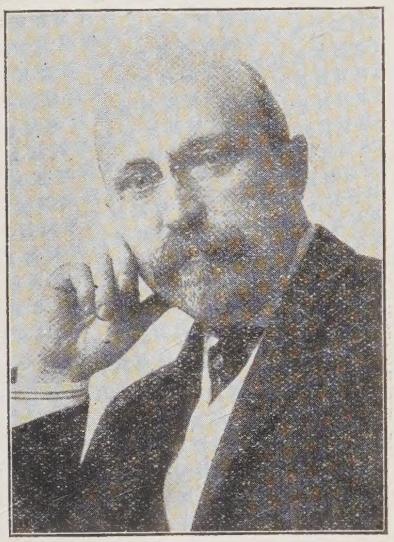
CONSTIPATION, like most other evils present in modern life, has been charged to civilization. Sir Robert Sawyer emphasized this notion very emphatically some five years ago. Several years previously, a St. Louis physician expressed the opinion that "Constipation so common among civilized people, and especially females, is in some measure due to the restraint of clothing and modesty; if children and men and women were no more restrained by clothing and sense of what is decent and proper than the beasts of the field, constipation in the human family would be as rare, no matter what their ordinary diet is, as it is among the beasts of the field."

This opinion, however, like most opinions as to the good hygiene and sanitation of primitive man is totally erroneous. The Indian, A. B. Holder remarks, will leave the tepee just as the dog will go out of the house or kennel, but he (or she) will stop within ten feet therof in the sight of the entire village, when and where the inclination overtakes him or her, will spread the all-useful blanket above the head and obey with commendable promptness the calls of nature, still the Indian is constipated.

The conditions, however, of the 18th century domestic hygiene, as described by Dr. Smollett in Humphrey Clinker would, however, justify constipation, especially in the working class and in the fairer portion thereof, as it does in Spain and many continental European countries today. Winifred



GEO. F. BUTLER, M.D.

Smollett's hysteric servant-girl, well describes their conditions in Edinburgh in the 18th century.

Constipation may be defined as an interference with the proper evacuation of waste products contained in the intestine. It implies, however, something more than mere ejection of waste. Unless there is elimination of the products normally evacuated through the intestine, mere relief of imperfect evacuation does not remove the symptom complex constituting constipation. There is here, as elsewhere in physiology even a psychic element. The cloacal condition normal in the lowest mammals whereby one canal

*Read before the Mississippi Valley Medical Association, Hot Springs, Ark., November 7, 1906.

fulfils the united function of micturition, defecation and conjugation, remains quite late in embryogeny and sometimes survives at birth. Imperfect evolution of the rectum from the cloacal condition sometimes persists as a factor in the constipation of adult life. For a time in youth, that there is some defect resultant on this, is shown by the relief felt on excretion. In early life, as Havelock Ellis remarks, the emotions caused by forced repression of the excretions are frequently massive and acute in the highest degree, and the joy of relief is correspondingly great. But in adult life, on most occasions, these desires can be largely pushed into the background of consciousness, partly by training, partly by the fact that involuntary muscular activity is less imperative in adult life so that the ideal element in connection with the ordinary excretions is almost a negligible quantity. Many attacks of brief melancholia and apathy may be removed by a saline purgative. The mental relief is so intense as to seem like a mental stimulation.

Constipation may be expressed, contradictory as the term seems, in diarrhea. There is a post-constipational diarrhea of the lower bowel which is relieved by castor oil and rhubarb, agents which tend to expel the irritating contents of the upper bowel and constipate the lower. Much of the repute of castor oil is due to its usefulness in this class of cases, that it acts as an eliminant, purgative and anodyne, is shown by its remedial action in neuralgia. Here the anesthetic action of ricin doubtless also plays a part. That suggestion has an influence in checking or inhibiting the peristaltic action of the intestines, so necessary for their proper function is shown in cases like the following of D. Hack Tude, which are quite frequent:

A seaman had suffered from four successive attacks of constipation. So far as could be detected, there was no organic disease to account for its occurrence. The symptoms were such as usually follow protracted constipation of the bowels; and on all four occasions large and repeated doses of the strongest purgatives (croton oil included), powerful enemata, cold affusion, and hot baths had all been required to be persevered in to procure relief. On the fifth attack, he was put under grs. ii of bread pill every seven minutes; much anxiety being, of course, expressed to guard against any overdose, as well as to watch the effect of what was thus given. Within two hours he became sick (one of the symptoms expected from the medicine), and his bowels were freely open almost immediately after; nor did they again become constipated.

These cases under the influence of suggestion principles, have become rather numerous in the practice of what is called, mental therapy. Very probably a by no means small percentage of the "cures" charged to miracles and Christian Science belong in this category. Persons of robust health and undisturbed performance of physiologic function have, as Bristowe remarks, an alvine evacuation at least once daily. Yet many, who at any rate seem equally healthy, have their bowels habitually relieved every two or three days only, or even but once a week or fortnight. Cases are not altogether rare in which the interval between successive evacuations have been extended to a usual period is apt to produce, not only local uneasiness, such as fulness, heat, tendency to piles, and flatulence, but also some degree of general disturbance indicated by headache, foul breath, loss of appetite and dyspeptic symptoms, and not infrequently ends with occurrence of more or less tenesmus and even slight dysenteric diarrhea. Habitual constipation is usually attended with chronic discomforts of the same kind; but leads also to more or less permanent hypertrophy and dilatation of the rectum—conditions which render this tube less efficient for the performance of its expulsive duties. When constipation is of long duration, not only the rectum, but the whole of the large intestine may become dilated by its contents and hypertrophied, the mucus surface may be fretted into ulceration, and perforation may ensue. The dilatation is sometimes so great that the colon measures from ten to twelve inches in circumference. The chief dilatation occurs in the rectum, sigmoid flexure, and cecum. The hypertrophy, under such circumstances, is general, but it is usually greatest in the sigmoid flexure and upper part of the rectum, where the thickness of the muscular coat may be one-eighth inch or more.

Constipation depends on various causes. It sometimes arises temporarily from change of diet, scene or habits, among which may be included anything interfering with the regular performance of defecation; it is common in many diseases; and it occurs in a chronic form in chlorotic or dypseptic girls and young women, and in persons of sedentary habits or sluggish constitution.

The epithelial surfaces through which the substances needful to the body enter it, and the waste products leave it, are physiologically outside the body. The mucous membrane of the alimentary canal is in a sense as much external as the skin covering the surface of the body, and is subject to the same irritating influences. The muscular mechanism of the intestines possesses the power to rhythmically contract and relax

in a wave-like manner (peristalsis), the peristaltic waves traveling downward. These rhythmical movements of the intestines carry their contents along their lumen from the cardia to the rectum, and are controlled by a nervous mechanism. The normal contents of the small intestine are fluid, and are passed into the large intestine as such. In their passage along the large bowel the fluid part is largely absorbed and the semi-solid part remaining is passed on into the rectum as feces.

In order that any substnce may act as a purgative it must change the normal contents of the bowels in such a way as to cause fluid or semi-solid evacuations. When a substance locally irritates the intestinal mucous membrane the intestines respond by increased peristalsis, which hurries the fluid contents of the small intestine through the large bowel so rapidly that absorption does not take place and the feces are evacuated in a fluid form.

Intestinal peristalsis is increased by the stimulation of—

The intestinal muscles (moderate stimulation);

The afferent nerve connecting the intestinal mucous membrane with Auerbach's ganglia;

Auerbach's ganglia;

The ends of the efferent nerve passing from Auerbach's ganglia to the intestinal muscles;

The ends of the efferent passing from the intestinal mucous membrane to the brain.

The motor centers in the brain: The ends of the motor nerves terminating in Auerbach's ganglia.

Depression of—

The inhibitory motor center.

The ends of the inhibitory motor nerves terminating in Auerbach's ganglia.

The inhibitory motor center in the suprarenal plexus.

Any substance which stimulates the motor apparatus or depresses the inhibitory motor mechanism will increase peristalsis.

Intestinal secretion may be promoted by any substance which serves to stimulate the secretory or the vaso-dilator apparatus or to depress the inhibitory secretory or vaso-constrictor mechanism.

By increasing peristalsis and hastening the removal of fluid frcm the bowels absorption takes places less rapidly.

By giving drugs—e.g., magesium sulphate —having high osmotic equivalents, with a great affinity for water, the absorption of fluid is prevented.

Substances which in some manner affect the columnar epithelium of the intestinal glands retard absorption.

Drugs which diminish the circulation in the intestinal mucous membranes act as deterrent to the absorption process.

The principle underlying drug treatment of constipation is the proper combination of synergists to secure proper intestinal peristalsis, proper intestinal secretion, proper fermentative changes in the intestine, which will turn upon proper hepatic and renal action. In certain cases diminished water supply to the liver and intestines with polyuria, play an important part in constipation and in failure of elimination. Here the hydragogue cathartics are imperatively needed, since they draw the needed water from the kidneys to the intestinal canal. The drugs having the best action here are apocynin, cannabin, aesclepidin, chionanthin, leptandrin, iridin, podophyllin and elaterium, combined with eserin salicylate. The last is preferable to increase peristalsis. In cases where there is imperfect hepatic action and imperfect intestinal fermentation, a combination of inspissated ox-gall or bile acids, pancreatin, oil of birch, creosote, extract of colocynth comp. with eserin salicylate will be found of value. At times where there is atony of the lower bowel, cascarin is a useful addition. In the dietary treatment which includes hydrotherapy, the table of A. L. Thomas is an excellent guide. Berries and pears, however, should be forbidden, as they do not irritate the intestine and force expulsion, but remain to form the nidus of material which is resorbed and passes into the general circulation.

In the psychic treatment of the condition, one suggestion should always be made: The patient should be ordered to take a regular hour for the toilet room, and remain there a definite time, whether the bowels move or not. He should be assured that this will secure and maintain regularity, through its action under the rhythmic law of the nervous system.

In selecting drugs to overcome constipation one should know how and where the various drugs exert their several influences. Nearly all cathartic drugs act by some local influence on the intestinal mucous membranes previous to absorption; others again affect the bowels after they have entered the circulation—strychnine, for example, physotigmine, pilocarpine, etc., acting in this manner. Certain other drugs, such as podophyllin, colocynthin, etc., if injected into the circulation are excreted by the mucous membrane of the intestines, and by their irritation produce catharsis.

The condition of the intestinal canal has much to do with the activity of certain drugs. Thus certain medicines produce catharsis regardless of the reaction of intestinal

fluids; others are inert without the presence of bile or other alkaline fluids or salts; and still a third class occasions catharsis only when after ingestion they come in contact with an acid. Of the last mentioned, magnesium carbonate is an ecxellent example, the drug being inert unless it be acted upon by an cid in the stomach or bowels.

It is a remarkable fact that different cathartics act more energetically upon different portions of the intestines. The action of calomel, for instance, is almost entirely confined to the duodenum, while aloin acts only upon the descending colon and rectum, and should be used cautiously, because of its tendency to produce hemorrhoids.

In selecting cathartics, therefore, knowledge of the part of the intestinal canal to be acted upon and the locality in which the drug operates is necessary in order to secure the most satisfactory results.

Many cathartics contain principles which render them toxic to the stomach; others greatly stimulate the secretion of bile (hepatic stimulants); while the cholagogues merely hasten the expulsion of bile from the intestinal canal, preventing its absorption.

Certain drugs, being excreted in the milk, which it renders purgative, are well adapted for administration to the nursing mother in order to produce catharsis in the infant. Castor oil, greatly augmenting the secretion of milk, is an excellent medicine as a laxative in such cases. Aloin increases the menstrual flow; other drugs promote the secretion of urine, etc.

Active catharsis by the more powerful hydragogue or drastic purgatives would be, of course, contraindicated in appendicitis, peritonitis, intussusception, pregnancy, and typhoid fever, or where there is inflammation of the mucous membrane of the gastro-intestinal tract.

Probably no group of medicines demands greater judgment in administration than cathartics.

Ordinarily, the efficiency of these agents is increased and their operation rendered less irritant by associating drugs acting upon different portions of the alimentary canal. Their action, too, is more prompt and certain when the remedies are given upon an empty stomach and the efficiency of their operation is enhanced by exercise and diminished by rest or sleep.

The difficulty with most of the laxative pills is that they are too strong and are given in too large doses. Too large doses overstimulate and exhaust or weaken the muscular tone so that "the last stage of that man is worse than the first."

To overcome chronic constipation very small tonic doses are needed. A most excellent tonic anti-constipation pill is that put up by Abbott the formula for which is: Aloin, gr. 1-25; strychnine sulphate, gr. 1-500; atropine sulphate, gr. 1-2500; oleoresin capsicum, gr. 1-500; emetine, gr. 1-500. Of these a sufficient quantity (three to six or more) should be given three times a day, to produce one daily stool, preferably in the morning, continuing steadily and reducing the dose as a curative effect is produced.

The action of cathartics is promoted by the addition of small doses of emetics, mydriatics, quinine and bitters, quinine especially strengthening the action of magnesium sulphate.

As has been previously suggested, a knowledge of the portion of the intestinal canal upon which the various cathartics act is of primary importance. Thus, if it be necessary to influence only the duodenum calomel or podophyllin should be used; if the small intestine, senna or jalapin; if the descending colon or rectum aloin—the drugs acting upon these organs alone.

Moreover, due consideration should be given to the proper time for the administration of the different cathartics, the resinoid purgatives acting best when taken at night or before dinner, and the salines when taken in the morning before breakfast. The mode of administration is also of great importance, in order to obtain from these agents the fullest benefit. The salines, for instance, act best when given in solution in either very cold or very hot water, their activity being enhanced by association with bitters, iron, or sulphuric acid. On the other hand, the resinoid drugs should be administered in the form of pills, and if, for any reason, it is desirable that the drug should enter the intestine without coming in contact with the mucous membrane of the stomach, the drug may be given in the form of pills coated with keratin, which is unaffected by the gastric juice, but readily dissolved in the alkaline intestinal juices.

Small rectal injections of glycerine (preferably with an equal amount of water to prevent the tingling or burning sensation which undiluted glycerine produces), and large injections of olive oil are often of much value in the treatment of constipation.

Mild diluent beverages promote the activity of cathartics. Hydrotherapy, electricity, exercise, massage and vibratory treatments are invaluable adjuvants in the treatment of constipation. Much can be done with water properly applied. Fomentation over liver twice daily followed by heating compress during interval will increase the flow of bile. Wet girdle at night; cold fan donce to abdomen;

cold percussion douche to spine. Cold plantar douche 1 to 3 minutes; cold rubbing sitz 70 deg. to 75 deg., 5 to 20 minutes are valuable hydriatic measures. Small cold water enemas and graduated enemas act well in some cases. Probably no non-medicinal method surpasses abdominal massage or vibratory massage. The treatment should aim to stimulate peristalsis, develop muscular strength in the abdominal walls and increase the secretion of bile. All of these things can be done if proper vibratory treatment is persisted in for a long period of time.

In conclusion, I would emphasize the necessity of resorting first and always to non-medicinal methods, as proper diet, physical exercise, hydrotherapy, and vibratory massage in the treatment of constipation, and of using drugs only if necessary, and then only with perfect knowledge of the exact condition to be remedied, and a thorough knowledge of the action of the various drugs employed.

To License Missouri Nurses.—Representative Phillips of St. Louis, has introduced a bill providing for the registration, examination and licensing of nurses. The bill provides for the creation of a board of examiners, to consist of five persons, chosen by the governor, who shall conduct the examination of applicant to be nurses.

Denier's Cholera Sera.—Dr. Denier, the bacteriologist from the Saigon Pasteur Institute, arrived in Manila during August, and requested that he be given an opportunity to test the efficacy of his curative cholera sera. His request was granted, and he treated sixteen cholera patients at the San Lazaro Hospitals. Of these, seven recovered and nine died, which gives a mortality of 56 per cent. The death rate among patients treated at the San Lazaro Hospitals by ordinary medical treatment, during the same period, corresponds very closely to this mortality.

For Breaking Up a Cold.—Anything that will set the blood into active circulation is good for a cold. Bathe the feet in hot water and drink hot water or hot lemonade, on going to bed; take a salt water sponge bath and remain in a warm room; bathe the face in very hot water every five minutes for an hour or so; snuff hot salt water up the nose every hour or two. Four or five hours' brisk exercise in the open air is often effective. Four or five grains of quinine taken at night will usually have a good effect. A vapor bath, followed by a cool sponge bath, is good. In bathing, one should be careful not to get chilled.

EXOPHTHALMIC GOITRE.*

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MEDIAPOLIS, IA.

I give the above title to this paper, not unmindful that it is a misnomer, for it is naming a disease by symptoms not always present. Thyroidism would scarcely suffice, as that would indicate a settled pathology back of this symptom-complex. My object will be, from a position unbiased by any special personal experience, to give a short resume of the literature obtainable upon this disease. Most of us have had some limited observation of Graves' disease in its most acute form, and we know how embarrassing is the treatment when we have no real guide to follow. Its fearful tachycardia, its profound nervous unrest and its entire intractable symptom-chain leave a memory to the physician not readily affaced. A rapidly fatal case under my own care three years ago, an apparently recovering case which I am now attending, a recent fatal case under the eye of a confrere, and still another fatal case depriving a magnificent home of an only daughter, and that, too, in spite of every effort that money could purchase to prevent the disaster—all these cases have impelled me to search for some reliable knowledge concerning this not necessarily fatal condition. I wish to state clearly at the outset that none of these fatal cases had the benefit of either dietetic, serum or surgical treatment. It is possible that all of them might have been saved. I have no pet treatment or theory to offer, but I hope it may be of some benfit to others as well as myself to define the attitude of the profession toward this disease.

Any one who investigates the literature upon exophthalmic goitre will be surprised at its bulk and not pleased at its lack of definite knowledge. The only contributions really valuable are quite recent, for only within the last three or four years have any means been found for combating this disease with any material degree of success. With its pathology unsettled, it is only to be expected that the remedies vaunted as curative should be many and widely differing in therapeutic action. Belladonna, quinine, sal. sod., diphtheria antitoxin, arsenic, serum-therapy, rest cure, diet cure, electricity, surgery, etc., have found warm allies, but no statistics until very recently gave one any confidence in any agency from the materia medica. An elaborate argument may be found produced by those who affirm and those who deny that the disease finds origin in excessive activity

* Read before the Southeastern Iowa Medical Society.

of the thyroid gland. The most vigorous presentation of the negative of the debate has probably been produced by William Hanna Thompson of New York. It will perhaps serve our purpose to just epitomize this argument and place against it the affirmative as it is reflected in the literature. In 1904 the physician mentioned edited an elaborate volume with detailed accounts of some eighty cases of "Graves' disease." This record is interesting for its painstaking enumeration and classification of characteristic symptoms, and because it establishes certain important points. Though recent surgical and serum results somewhat discredit its conclusions it was refreshing to the general practitioner, because it gave him some definite therapeutic ground upon which to stand.

By way of preface Thompson says: "To what extent a specific disorder of the thyroid and its accessories is essential to the origin and continued progress of Graves' disease is rendered doubtful by the occurrence of cases of Graves' disease in its severest and even fatal forms which show no evidence of the thyroid being involved at all." He compares the clinical histories of 28 patients who at no time showed any evidence of exophthalmic goitre, symptom by symptom, with the clinical histories of 42 patients who did have Graves' goitre—all 70 cases occurring under his own observation. He states specifically, that the comparison is made to demonstrate that this disease may have no reognizable and therefore, probably, no necessary relation to the thyroid gland. He pursues his comparison of symptoms under some twenty-eight headings, but I shall only mention the more common and characteristic ones. First and foremost, he places the tachycardia, which is peculiar because of its persistence over months, from 90 to 120 and more, being practically the same, night and day, sitting or standing, a sleep or awake, 'running faster than in most fevers.' It is referred to as the pulse that never quiets down. A case now under my observation came across the country fields to see me as I was calling at a neighbor's. The case was in a state of acute nervous unrest with pronounced exophthalmos and moderate thyroid enlargement. To my astonishment the pulse ran 150, and in no way could I obtain a reduction of its rate. Then followed an attempt at rest cure, a la Mitchell, but appetite immediately vanished, patient rapidly lost flesh and nervous system became tumultuous. After a month allowed her to get up, when her appetite returned and symptoms generally improved. Her pulse during this period fell to 120, where it has remained stubbornly until lately when it has been as low as 100 I have repeatedly in the office waited for that pulse to calm down, but it has never done so. This tachycardia becomes virtually pathognomonic as the bradycardia is in the symptom-complex of "Stokes-Adams disease." "This rapidity of pulse would suggest," says Thompson, "its dependence upon some functional disturbance for none of the other causes of tachycardia would continue to so affect the heart without the gravest disorder of nutrition." In 70 cases Thompson found this symptom absent but twice and he found it as constant in his 28 cases without apparent thyroid enlargement as in those with goitre.

Next in importance among the more or less constant symptoms stands "a certain persistent, causeless nervousness." Rather choreic in appearance, it does not give a choreic history or etiology and does not quiet without material general improvement. Thompson found this system marked in each class of cases. "Again," says he, "there are certain muscular tremors, involving especially the eyelids and hands, sometimes the right—sometimes the left." This condition the author shows to be characteristic in each set of cases.

Of the special senses, the ears showed an especial liability to disturbance in cases with or without apparent goitre. Many experienced considerable deafness or tinnitus, throbbing and painful auricles. The ear symptoms were first of all to improve when patient convalesced.

Another symptom of rather indefinite character seems to be the presence of certain local or general pains without evidence of inflammation or swelling. The palms of the hands, tips of the fingers, toes and heels were oftenest affected and were sensitive to touch. Although Thompson claims these pains to be entirely distinct from rheumatic pains, it is interesting to note that salicylate of soda has the credit for curing a few cases of exophthalmic goitre. In a journal number of 1903 Chaddock reports three cases of Basedow's disease greatly benefited by this salt. A leading physician of Galesburg told me of two apparent cures in his practice from salicylate of soda, and two members present here today have told me of like experiences with this drug. Apparently a case now under my control has improved fifty per cent upon salicylate of soda. Thompson mentions this drug as quite beneficial, but attributes its virtues to intestinal antisepsis.

Another sympom quite common in these cases is migranous headaches.

"The danger to life," says the author, "and the real index of the gravity of these

cases is the condition of the gastro-intestinal tract." From the digestive disturbance Thompson takes his clue as to the real etiology of this disorder which he believes to be a poison liberated during process of digestion. Of all symptoms the digestive he found to be most uniform in each class of cases amounting to incoercible emesis and diarrhea in severe cases, but without inflammation. The tachycardia and nervousness fluctuate with the degree of intestinal disturbance. The diarrhea is without pus, mucus or blood.

Another important observation is that the fact of inheritance is marked in each class, several of the cases without goitre having immediate relatives with Graves' goitre.

The author says, "If it be asked, what are the most characteristic features of Graves' disease would answer, next to its specific tachycardia is the morning exacerbation of its chief symptoms. Of both goitrous and non-goitrous cases all but seven out of seventy were plainly worse in the mornings, feeling quite comfortable by evening" The tachycardia, diarrhea, nervousness, headaches, etc., were all more pronounced, strange to say, after a night's rest.

This paper must be considered but a brief summary; for full particulars, original sources may easily be investigated. I must give Dr. Thompson credit for the most carefully written consideration of Graves' disease that I have found, and though the literature since 1904 has materially strengthened the affirmative by result of therapeutic test, nevertheless he established one important point. His presentation is strong and fair, I believe, in that he frankly states: "Positive results have followed thyroidectomy even in grave cases" "The fact remains," says he, "that resection of one-half or more of the hypertrophied gland substance, has been followed in numerous instances, on testimony of competent observers, by amelioration of the constitutional symptoms amounting, it is claimed, to a supposed cure of the disease itself in the majority of those operated upon, and in other cases to undoubted improvement with a comparatively small percentage of failures." He is not, however, willing to let this therapeutic test stand as absolute. However, Thompson makes much of his own therapeutic test which is that of diet. According to his 70 cases indisputable benefit followed certain dietetic management. He cites the fact that carnivora died speedily after thyroidectomy, omnivora were less profoundly affected, and herbivora least of all or not at all. A little experimenting with a carnivorous diet convinced him that red meats speedily accentuated all symptoms of Graves' disease. In fact, he says that meat is as strongly contraindicated in these cases as are the starches in diabetes. On the other hand, he found pronounced benefit from a fermented milk diet, and in fact this constituted his chief dependence. He struck from the diet list first of all red meats and allowed cooked fruits, potatoes, hominy, rice, bread and butter. Medicinally, he declares invariable benefit by amelioration of all symptoms followed a mercurial laxative of calomel or blue mass once a week; even the diarrhea was relieved. Other drugs utilized belonged to the so-called intestinal antiseptics. Recently, an observer reported several cases improved or cured by dietetics, and some months ago a confrere told me that while treating the digestion of an exophthalmic goitre case the general condition materially improved, and with persistence in the treatment the case got well.

If the results of thyroidectomy are not significant as a therapeutic test then the dietetic test is fallacious on similar ground. The fact that attending to the digestion, treating the assimilation often leads to a cure is not absolute proof that the evil originates in the digestive tract. Attention to the patient's nutrition will give nature the needed assistance to perfect cures in more diseases than will any other remedy. Diseases which we treat specifically are rare indeed, and yet men recover from most illnesses. Normal digestion and correct elimination are good prophylaxis.

Points emphasized by the negative are: that many cases of Graves' disease have no apparent exophthalmos or goitre. There can be no doubt about the identity of the two sets of cases. The main question is whether an apparently normal thyroid may not hypersecrete. There is no way, as he states, of estimating chemically the amount of the secretion of this ductless gland. The discovery of the parathyroids, although they are considered to be entirely distinct histologically, has shifted the debate somewhat, but in the main the question is the same, i.e., Is this disease due primarily to alterations in the thyroid secretion or its accessories, or is its pathology remote from these organs? If excessive thyroid activity does not necessitate hypertrophy of the gland, the negative argument is weak in an essential particular. Thompson says, "The severity of the toxemia in Graves' disease bears no relation to the degree of thyroid hypertrophy, if that be taken as an index of overactivity." Again he says, "The comparison of cases is made to demonstrate that this disease may have no recognizable and therefore probably no necessary relation to any state of the thyroid gland." It would seem here that the test

should rest upon microscopic scrutiny. The question is, however, somewhat embarrassed by the fact that several observers have found an hyperplasia of the secreting cells in cases of parenchymatous goitre, which gave no evidence at all of exophthalmic goitre. This fact is also mentioned by those who support the affirmative, and is not accounted for by them. Thompson's cures by dietetics he states as 70 per cent of cases controlled.

The affirmative of this argument is championed by the advocates of serum-therapy and surgical intervention. These observers divide the cases of Graves' disease into various types according to the condition of the thyroid gland, but in the main hold to overthyroid activity as the chief etiological fact or in the disease. Their therapeutic measures are based upon this pathology and the results, particularly of late, are certainly reassuring.

In the Northwestern Bulletin of December, 1905, I find mentioned thyroidectine as the most important new drug of a twelve-month." Under the head of serum therapy two distinct methods have been employed to produce a substance that would neutralize the toxemia from the thyroidism. Thyroidectine was the result of the first attempt, and is prepared from the serum or milk of thyroidectimized animals. The theory upon which its elaboration depends is as follows: Normally, in the blood, are certain antibodies which neutralize the action of the thyroid secretion. In animals from whom the thyroid has been removed there is an excess of this material, which when given to a case of Graves' disease should prove antidotal. Thyroidectin prepared from the blood serum and rodagen from the milk of thyroidectomized animals were the first preparations whose results gave promise of bettar days along this particular line for non-surgical treatment of exophthalmic goitre. In that bulletin it was stated that there had been quite an uniformity of opinion among some twenty published reports of the efficacy of these drugs, especially in the amelioration of symptoms. Since that time there have been many observations made relative to these preparations, and it would seem that they could be relied upon in acute cases to control the severe symptoms, but their curative value is much in question. It has been suggested that they may be useful to put serious cases in better condition for operative measures.

Another serum, quite distinct in character and preparation, is the so-called "Rogers-Beebe' serum of New York. In the opening address at the American Medical Association in Boston, the chairman of the department of "Pharmacology and Therapeutics," said: "The use of the "Mobius serum" of thyroidectomized sheep has been established as a measure of practical value in the treatment of exophthlamic goitre." The serum of Beebe & Rogers, although differing much from the Mobius promises well." The preparation of the "Rogers-Beebe serum" is very elaborate, the details of which may be seen in the reports of the two investigators published in Journal of September of the current year, or the Medical Record of February 2. As this paper is a resume, these details will not be given. We have nothing to do in this discussion with those therapeutic measures whose limited reputation is due to a coincidence of their administration with periods of latency charcteristic of this disease. We are interested only in those agencies which take cognizance of some definite indication and are the result of a logical conception of cause and effect. Let it suffice to state that the "Rogers-Beebe serum" is prepared from human thyroids removed by operation or at autopsy. The serum has yet to be standardized, and it has not yet been decided as to whether the normal or pathologic gland will produce the most efficient serum. Also, the thyroids of some animals produce better results than those of others, and this point must be settled. It will answer our purpose to state the statistics of these observers. Their record is as follows: Cases treated numbered 90, of which 23 have been cured of all symptoms of thyroidism, 52 have been more or less improved, 11 failed to improve and 4 cases died. In the fatal cases the serum was plainly not at fault. These are new statistics, and Dr. Rogers thinks that more time will cure up some of the improved cases. Their conclusions are as follows: "When all conditions are considered, the serum must be reckoned as an agent of positive value in the medical treatment of exophthalmic goitre. A small percentage of trials have resulted in failure, a much larger number in improvement and an encouraging number have been cured." It is too early to be dogmatic about the serum, but those who have watched its development so far have definite hope for its future. When the best raw material for making a potent serum and the best process for its production have been ascertained, when the means for its standardization have been perfected, certainly still better results can be looked for. Whatever surgery may accomplish, there will always be a place for non-surgical treatment in a certain percentage of cases. No one who has watched the marvelous results of diphtheritic-antitoxin or of the anti-streptococcic serum in well selected cases can but hope for a more scientific day for medicine along these lines.

We have yet to consider the most brilliant

chapter of the treatment of Graves' disease, a chapter of more recent writing. That this embraces the ideal treatment of exophthalmic goitre, many competent men believe. In estimating the place of surgery in treating this condition we must consider the surgery of today and not depend upon gross results from surgery covering a period of fifteen years. The fatality in early sympathectomies and thyroidectomies was very high. It was considered that these cases were very poor subjects for anesthesia or surgical shock. It has been left to a few men to prove that this danger has been unduly emphasized and that under proper conditions this work can be accomplished with but small risk.

In an editorial in the Medical Record of June, 1906, the results of Curtis, Hartley, Mayo and Schultz are taken as a whole and out of 136 thyroidectomies 17 deaths are are reported, i.e., a mortality of 12%. Surgery has and is doing better than this, but even these results are considered sufficient to place thyroidcetomy at the head of curative measures, it being understood that all cases enjoying operative recovery are improved or cured according to whether sufficient gland tissue has been removed or not. Among the more important surgical contributions to the literature must be mentioned the paper by Dr. Shepard, of Montreal, published in the Journal of September, 1906. That paper and the discussion following it at the A. M. A. meeting fairly well epitomize the success of the scalpel in relieving cases of thyroidism. He gives a synopsis of 17 cases, three of which died, and of the 14 escaping thyroidism, 9 were completely cured, three much improved, one improved and was lost sight of, and one relapsed. These cases were all pronounced, and those who died were desperate cases. Dr. Shepherd states that the diagnosis must be made from the clinical symptoms, and that the microscope does not reveal a constant pathological histology.

Ochsner states that if the serum proves to be useful, operation must be reserved for cases in which the serum has failed. He thinks that with proper precaution the operation is relatively safe. Results in 167 cases gives 72% cured and a mortlity of 5½%.

The literature is full of praise of the Mayos for excellent results following thyroidectomy and several of my confreres have personally witnessed their work along these lines and are enthusiastic in their endorsement. Desiring not to overstate the surgical statistics, I have just secured the following statement from Dr. Charles Mayo:

"We have operated upon 112 cases of exophthalmic goitre with 9 deaths, only two of these occurring in the last 70 cases. About 80% make a very rapid recovery, while of the remaining all are improved but as many patients have had the disease for a long time, they do not completely recover from the eye symptoms and occasional attacks of cardiataxia."

The one strong argument of the affirmative is that decreasing the amount of secreting gland by thyroidectomy results, in those cases escaping death from acute thyroidism, in invariable improvement, and if sufficient gland tissue has been removed, in cure. Also that serums prepared upon this pathology as a basis are efficieut.

CHOLERA never travels faster than man can travel, and its progress is facilitated or retarded by the condition of the roads, thus showing that modern civilization is not without its disadvantages.

THE expense of placing in operation the Pure Food and Drugs Act will require three quarters of a million dollars. This is a large slice of the $5,000,000 which congress will appropriate to cover the expenditures necessary in enforcing various federal control and regulations. The division is as follows: To enforce the meat inspection law, $3,000,000; to enforce the pure food law, $750,000; to regulate interstate commerce, $658,500; to enforce the antitrust laws, $250,000; employment of special attorneys, department of justice, $125,000; employment of special counsel for bureau of corporations, $175,000; to enforce law establishing uniform system of naturalization, $200,000.

EUROPEAN LONGEVITY.—German statisticians who report the result of recent investigations say that the German Empire, with a population of 55,000,000, has but 78 persons who are more than 100 years old. France, with a population of fewer than 40,000,000, has 213 who have passed their hundredth birthday. England has 116, Scotland 46, Denmark 2, Belgium 5, Sweden 10, and Norway, with 2,300,000 inhabiants, 23. Switzerland does not boast a single centenarian, but Spain, with about 18,000,000 population, has 410. Servia has 573 persons who are more than 100 years old, Roumania has 1,084, and Bulgaria 3,883. In other words, Bulgaria has a centenarian for every hundred of its inhabitants, and thus holds the international record for old people. In 1892 there died in Bulgaria 350 persons who had lived for more than a century. The death of Jean Mignot, of Montpont, who was probably the oldest Frenchman, has recently been reported as occurring at the age of 107 years.

TALKS TO RECENT GRADUATES.

A. L. BENEDICT, A. M., M. D.

BUFFALO.

VI.—BOOKS, MAGAZINES AND READING.

SOME libraries impress one as does the best room of certain houses, that they are almost never used but represent an awe-inspiring acquisition of chattels. Others are like the living rooms of other houses, bright, cheerful and with the stamp of daily use. The selection of a library must be governed largely by individual circumstances. If the physician has an abundance of money, there is no reason why he should not spend it in the rather promiscuous purchase of books and in liberal subscriptions to periodical literature. For most physicians, quality is rather to be chosen than quantity, especially when the income is limited and every purchase implies an abstention from something else.

Excepting the medical dictionary, compends of all kinds dealing with medicine ambitiously and generally, are rather to be avoided. A good rule is to purchase books covering one field of medicine and that one adequately for the needs of the individual. For instance, a cyclopedic work of a dozen or more volumes costs considerable money, and while of relatively enormous extent, it is almost impossible to treat any one subject sufficiently in detail. Sometimes, by the time the last volume is delivered, the first are out of date. Thus, in the course of a few years, the entire work, though impressive enough to patients, really is dead stock and must be duplicated in every particular, excepting for slowly changing branches such as anatomy, medical history, etc.

The medical library should be familiar to its owner. A book in which the physician cannot readily turn for information and the essentials of which he has not mastered, is like an assortment of instruments, bandages, etc., put away where they cannot readily be found. Thus the nucleus of a library should consist in the college textbooks and, as a matter of sentiment, historic reference in later years and even practical utility, it is a good plan never to dispose of such books. Purchases should then be made, according to the resources and needs of each buyer, selecting well recommended books each of which covers some one definite topic concisely but thoroughly. The view point differs according to the needs and abilities of the practitioner or student. For instance, a work on physiology which is thorough from the standpoint of the practitioner may be crudely elementary from that of the physiologic expert and, conversely, such a book as would be useful to the latter, may be too recondite and contain too great a mass of detail, obscuring general principles, for the use of the practitioner. It was long ago said, "Of the making of books there is no end." It is unfortunate that mercenary motives have considerable influence on the publication even of professional literature. From the standpoint of the author, a textbook usually pays if he has a teaching position which will guarantee the annual sale of a hundred text-books, independently of outside markets. It also pays in the comparatively rare instances in which the author enters an original field which appeals to professional interest generally.

From the standpoint of the publisher, there are three drawing cards: a trite subject, a well known author, and an abundance of illustrations. Practice, therapeutics, surgery, the better known specialties, dietetics, physical diagnosis, etc., may always excuse the appearance of a new book. A novel field is not so apt to interest large numbers of the profession. Similarly, the author must have a great reputation, but not for too original or specialized work. Even longitude and geography are part of the stock in trade of authorship.

The result, from the standpoint of the reader, is that medical books are not economic, either in regard to money or time. Of half a dozen works on practice, all the matter that is not common to all, might be placed in a small pamphlet and all that has originated with any popular author, in a few pages of print. On the writer's shelves, are two works on urinary analysis, as nearly alike as two peas, in all essentials. What is needed in medical literature, is a sort of a loose-leaf system, by which new ideas and discoveries can be conveniently added to a standard basis. To a certain extent, this can be achieved by marginal notes and slips of typewritten abstracts, but, after all, the individual reader needs, not so much what he has found as what he has not found that is new and interesting. Perhaps, some day, we shall have a centralized board that will perform this kind of abstracting and digestion of new facts.

As to medical magazines, there must also be the attempt to suit individual interests and needs. If the writer were asked to select the most indispensable medical periodicals in the country, which should be saved if all others were to suspend publication, he would choose the three or four that are the butt of almost open invective and sarcasm, whenever the subject of medical journalism is under

discussion. These journals, with their editorial recommendation of proprietary pills, powders and salves; with their enlistment of professional sympathy in behalf of some freak method of therapeutics—on the lines of the Bird Defenders of old St. Nicholas; with their open court for prurient anecdotes and correspondence disproving the existence of bacteria; with all their amusing and humiliating revelations of professional ignorance, are, nevertheless, life-savers. The ready-made pills and simple methods of avoiding operative procedures, may not represent the best therapeutics, but in the hands of the clientele of these journals, they at least are free from the immediate deadly action of powerful officinal drugs and cutting instruments. The long distance advice of the editor for cases obviously needing a careful physical examination, before a diagnosis can be made, usually does furnish a basis for safe and fairly good palliative treatment, and, while many of the patients will undoubtedly die of neglect of radical diagnostic and therapeutic measures, they will, at least, be made comfortable and saved from therapeutic homicide and many will recover sufficiently to seek better council later. We honestly believe that critical medical readers could much better practice without current medical literature, than could the weak and dependent babes of the profession without editorial guidance, of the sort so commonly and so justly condemned.

Few if any who read this article, will need their intellectual food peptonized or mixed with lime water, or fed to them through a rubber nipple. Even of good medical literature, there is an embarrassment of riches. Each physician must select a few journals according to his interests and needs, avoiding those which are too abstruse as well as those which are too puerile. A journal which is not read, might just as well be discontinued—but this opinion may not mean that the latter course should be pursued for, often, journals are left unread through pure laziness. Special journals have their value, even, perhaps one should say especially, to the general practitioner, but, in the main, those of a wide range are superior. The best journals are eminently practical—for instance, they will not devote much space to articles like the present—and yet a medical journal which deals exclusively with medical science, or even with medical science and the art of its application, and which neglects news, ethics, questions of polity, etc., is too narrow to fulfill the entire function of medical literature.

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FAVORITE PRESCRIPTIONS

MYALGIA.—

℞ Linimenti chloroformi..... ℥iij
Tinct. iodinii.....
Tinct. aconiti rac.....aa ℥ij
Tinct. opii..... ℥ss—M
Ft. linimentum.
Sig.: Use externally.

CHRONIC RHEUMATISM.—

℞ Pulv. resinae guaiaci..... ℥ j
Pulv. rhei..... ℥ ij
Potassii bitartratis.....
Sulphuris sublimata.....aa ℥ j
Pulv. nucis moschatae..... ℥ ij
Mellis vel glycerinae..... ℥xvj-M
Sig.: Two tablespoonfuls night and morning. (Used in the military hospitals of Europe, under the name of "Chelsea Pensioner)."

SOME COLLODION CORN CURES.—The following are taken from Dietrich's Manual, and all are good:

℞ Extract of cannabis indica.. 1 part
Salicylic acid.....10 parts
Larch turpentine.....10 parts
Collodion, 4%.....50 parts
Etheric spirit.....30 parts
Mix, and dissolve by agitation, then add
Acetic acid..... 2 parts

℞ Salicylic acid.....10 parts
Lactic acid.....10 parts
Collodion 4%.....60 parts
Etheric spirit.....20 parts
Mix and dissolve with acetic acid 2 parts.
Sig.: With a camel's hair pencil paint the collodion on the corn, taking care to avoid smearing any of it on the surrounding healthy skin. Two days after using, take a warm foot bath and repeat the application. Keep the vial tightly corked.

The etheric spirit consists of 1 part of ether and 3 parts of alcohol of 90%.

TO CURE A COLD.—The Bulletin général de Therapeutique recommends the following, taken one powder every three hours, for reducing a cold:

Sodium salicylate.....30 gm.
Dover's powder..... 3.6 gm.
Oil of peppermint..... 1 drop
Mix and make into twenty powders. As the cold subsides, 2 or 3 powders a day suffice.

For a single tenorrhaphy make the incision quite a little to one side of the line of the tendon and perform no more dissection than is necessary. This is to avoid adhesions of the tendon to the skin.

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OFFICIAL TRANSACTIONS.

THE PRESENT DAY STATUS OF THE PHYSIOLOGY OF THE THYROID GLAND.

ALBERT E. TAUSSIG, M. D.

ST. LOUIS.

UNFORTUNATELY I am not able to contribute anything new to the discussion tonight, but in connection with the previous paper a brief summary of the present status of thyroid physiology seemed desirable to your chairman.

The thyroid body lies to either side of the upper portion of the trachea, its two halves being connected in front by a band (the isthmus) of thyroid tissue. Microscopically it consists of a great number of small, closed vesicles, lined by cuboid epithelium and filled with the so-called colloid substance. The latter consists of a nucleo-proteid substance, probably a globulin, that has a marked power of combining with iodine. An iodine-bearing substance has been isolated, called iodothyrin, which is generally regarded as the active principle of the gland. There, however, is reason to believe that iodothyrin, as such, does not exist in the living gland at all, being merely a decomposition product produced by the chemical action of the extracting agents. The colloid substance of the thyroid enters the circulation in rather an unusual fashion. At one point or another of the vesicle, the epithelial cells that line it become absorbed, the colloid substance oozes out into the lymphatics that surround the vesicle, and is then carried away through the lymphatic trunks into the circulation. Imbedded in the thyroid gland are cylindrical bodies called the parathyroids, in man two on each side. These consist of nearly solid masses of epithelial cells, with less connective tissue than the thyroid and apparently without lumina. Embryologically the thyroids and the parathyroids are quite distinct. The former originate as diverticula from the primitive pharynx at the level of the first and second bronchial clefts, whereas the latter are formed from the bottoms of the third and fourth clefts. The thyroid is plentifully supplied by nerve fibres from the vagus with its laryngeal branches and the assumption has been made that the activity of the glands is controlled by the nervous system. We have, however, no real experimental information on this point.

The simplest method of studying the physiology of the thyroid gland consists in observing the effects following its partial or total extirpation. A vast deal of labor has been expended upon this problem not with altogether satisfactory results. Until recently our views on this subject were fairly clear. If only a portion of the gland is extirpated, no ill results need follow. The remainder may exercise all the functions of the original gland, often underoging great hypertrophy. If the entire gland be removed, a condition may result closely resembling that known as myxedema in man. When, however, one or more of the parathyroids is left intact, even though all of the thyroid tissue be removed, the animal may quickly recover its health. In this case the parathyroids undergo a curious change. The masses of cells form vesicles, colloid substance is excreted into these, and the parathyroid becomes converted into what anatomically and physiologically is practically thyroid tissue. Excision of the parathyroids, however, was supposed to be invariably and rapidly fatal, the animal dying with muscular twitchings and convulsions and presenting a picture simulating that known as tetany in man. Recent work, however, especially that of Qincent and Jolly, has shown that the matter is not as simple as was supposed. In some animals, especially in foxes, the thryoid with its parathyroids, is absolutely essential to life, the animals rapidly succumbing after its removal. Dogs and cats frequently, but by no means always, die after extipation of thyroids and parathyroids, while rats, rabbits and guinea-pigs apparently suffer no inconvenience from the operation. Monkey, stoo, that in so many respects stand closest to man, become ill after the operation, but soon recover and seem to suffer no further untoward effects. In short, the results of animal experimentation are so obscure and conflicting

*Read at the meeting of November 1, 1906.

that at present nearly all our knowledge of the function of thyroid and parathyroid must be derived from clinical observation. Here to be sure the data at our command are fairly uniform and clear, but from the nature of the case, no such exhaustive investigation and experimentation as is customary with animals is possible upon the human subject and theories intended to explain the results of surgical or medical interference must be accepted with much reserve.

Into this clinical aspect of the case I must not enter, since that has been discussed in the previous paper. Suffice it to say, that there seems good reason to regard both myxedema and cretinism as due to defective or absent thyroid secretion, both on anatomical grounds and on account of the striking effcet in these cases produced by thyroid medication. On the other hand, we must be cautious in interpreting these observations theoretically, if only because of the fact that most modern experimenters unite in declaring that none of the ill results observed in animals after thyroid or parathyroid extirpation can be at all diminished, not to say obviated, by the administration of thyroid substance.

The condition known as exophthalmic goitre is generally, and perhaps correctly, interpreted as due to an excessive activity of the thyroid gland. But here even more than in thyroid insufficiency our knowledge is purely clinical. Only isolated observers, by means of thryoid feeding or otherwise, have reported the occurrence in animals of conditions simulating Graves' disease and the fact that their results could not be reproduced by others makes it probable that their observations were erroneous. Accurate, therefore, as our clinical knowledge of this disease is, the various theories purporting to explain the manner of its occurrence must be regarded skeptically. The most attractive of these theories undoubtedly is that advocated by Dana. He views Graves' disease as a neurosis of secretion. The patients suffer from a nervous condition which results in an overstimulation of the thyroid gland. The gland secrets an excessive amount of its active principle. This, thrown into the circulation, still further irritates the nervous centres, whereby still greater degree of thryoid hyperactivity is produced, thus completing the vicious circle. Unfortunately, as yet, this theory must be regarded as purely speculative, if only because we have at present no real evidence that the nervous system controls the secretion of the colloid substance. The fact that the thyroid has a rich nerve supply proves nothing. The pancreas is as richly supplied with nerves and yet, as is well known, this gland will functionate quite as well when all of its nervous connections are cut as when they are intact. None of the experiments with the nervous supply of the thyroid gland have produced conclusive results. Thus Exner removed one-half of the thyroid gland in the cat and cut all the nerves leading to the other half. Only such temporary after-effects as often follow the removal of half the gland in this animal were observed. A few weeks after the operation, the animals were as well as ever. Hürthe and Katzenstein were unable to produce any histologic or physiologic changes by stimulation of the thyroid nerves though there were distinct signs of degeneration in the glands when the nerves were cut. They too, however, found that section of the nerves did not apparently interferes with the normal thyroid function. It would be of interest to repeat these experiments in animals, such as foxes, in which thyroidectomy is always rapidly fatal. As yet, however, this has not been done.

It would seem then that our experimental knowledge of the function of the thyroid gland is as meagre as our clinical knowledge is rich. Theoretical assumptions based upon the latter alone inevitably rest upon an insecure foundation. At present it would seem that the physiologic processes involved in excessive or diminished thyroid activity are much more obscure and probably much more complex than our clinical experience alone might lead us to suppose.

3519 Washington Ave.

Examine the inguinal regions for hernia in all cases of very tight prepuce, causing difficulty in micturition.

THE AMERICAN PHYSIO-THERAPEUTIC ASSOCIATION.—Physicians who are interested in the study and legitimate practice of the physical (drugless) therapeutic methods, notably electro-therapy, photo-therapy, mechano-therapy, hydro-therapy, suggestion and dietetics, are invited to join the American Physio-Therapeutic Association. Address the secretary, Dr. Otto Juettner, No. 8 W. Ninth street, Cincinnati, Ohio. The officers for the ensuing year are: President, Dr. H. H. Roberts, Lexington, Ky.; secretary, Dr. Otto Juettner, Cincinnati, O.; treasurer, Dr. Geo. H. Grant, Richmond, Ind.; executive council, Drs. W. F. Klein, Lebanon, Pa.; Jas. Hanks, Brashear, Mo.; J. W. Unger, West Point, Miss.; Chas. S. Nothen, Talladega, Ala.; R. W. Gibbes, Columbia, S. C.; S. J. Crumbine, Topeka, Kans.; F. L. Keeler, Perry, Okla.

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EDITORIAL

New York's Osteopaths.

AN attempt has been made by the osteopaths of New York to secure the passage of a bill giving them an independent examining board, such as now exists for the regulars, homeopaths and eclectics. Here in the West we see the osteopaths taking up the study of medicine, and we begin to feel that all they need is time to wind up their career; it is a little refreshing to be reminded of the osteopathic problem by news from the far East. Yet it is still a "problem," and we are glad to see that the chairman of the legislative committee of the New York State Society is alert.

The Post-Graduate speaking editorially of chairman Van Fleet's endeavor for lessening rather than increasing the number of state boards and of the endeavor of the osteopaths asys: "When osteopathy, like homeopathy and eclecticism, comes to be a sect in medicine embracing all the departments of medicine and surgery, it will be time enough to talk about giving them a separate Board of Examiners and about the injustice of not granting it. The cases are not parallel. The Homeopathic practitioners and the Eclectics, so long as they were recognized by the State with their separate State societies, as an organized society of practitioners were entitled to a Board of Examiners, but a band of confederated charlatans, no matter how many rich and wise people consult them, no matter how many people report the cases cured when the regular profession had abandoned them, so long as they have not a chartered existence with a complete system of instruction in all departments of medicine and surgery, have no right to ask the State for a separate board, no right to complain of injustice because they haven't it. As has been said to them over and over again, they have only to learn the principles of anatomy, physiology, chemistry, and all that constitutes a medical education just as the other sects are compelled to do, to be allowed by the State to practice as they will with osteopathy, or Christian Science, or Chinese vegetable and animal mixtures, but we do not believe that the legislature after hearing the case out, will ever give them a separate board.

The Present Status of Proprietaries.

A CAMPAIGN purposing the education of the profession in the merits of the U. S. Pharmacopeia and the National Formulary, in their latest revised forms, is sweeping over the country and is doing a deal of good. The St. Louis profession is not being neglected in the matter, aside from an abundance of literature, bearing on the subject, two meetings, one of the Medical Society of City Hospital Alumni and the other of the St. Louis Medical Society, have been held at which gratifying numbers of the profession have listened to the ablest pharmacists of the country, who have made it evident that two books under consideration are to be classed along with Gray and Webster, for they contain a wealth of wisdom which is nowhere else obtainable in so satisfactory a form. A considerable amount of attention is devoted to the proprietaries in these discussions, and justly so; there are good and bad proprietaries, just as there are the good and the bad in everything else. We have always felt that the only arguments worthy of consideration against the proprietaries were the matter of secrecy and inefficacy. A physician should certainly have definite knowledge of what he is prescribing, and in any case where the character of the remedy makes this impossible he would better abandon that remedy and employ something about which he can have definite information. These are days of therapeutic enlightenment. Far be it from us to in the slightest degree disparage any effort which will throw greater light on the medicines we would intelligently employ; the present movement is in line with this progressive period and with our personal beliefs and hopes. A thorough acquaintance with drugs and medicines unquestionably means death to therapeutic nihilism. But there is in this campaign a note which strikes us as discordant when we would have all harmonious; we find it in expressions met in informal addresses and in conversations like the following: "Cataplasma kaolini is the same as antiphlogistine;" "compound solution of creso is the same as lysol," etc. We have repeat

edly heard the sweeping statement that proprietaries are unscientific." We recall the eloquence of a member of our society who held up to ridicule those who employed antiphlogistine. It is indeed a satisfaction to have our personal view to the contrary, and a most satisfying experience with this remedy borne out by the commission of authorities who have sat and have decided that the something "the-same-as" deserved a place in the National Formulary.

It is needless to say that a vast number of physicians will continue employing the good things among the proprietaries, and will not shift their allegiance from lysol, or peptomangan (Gude), antiphlogistine, lactopeptine or glyco-thymoline, not to mention many others, that have stood the test of time and experience, unless some reason more potent than has yet been advanced be forth coming. The Formulary product is a definite answer to those who have criticised others for employing these agents, and leaves them little ground on which to stand, for a high commission, than which there is no higher, has sat thereon and has by the adoption of the formulas pronounced them good. The fact of imitation puts every agent imitated in the valuable column.

We know that the pharmacist may be profited to a greater degree if the Formulary products should in a measure supplant the proprietaries, but until he mends his ways we have little reason for concern about his interest in the matter; the little corner drug-store, whose name is legion in this city, will prescribe for more patients in an evening than will any physician in the neighborhood in a day; we have all at one time or another suffered from substitution to an extent that makes us somewhat incredulous whether the druggist is in his turn mindful of our material or scientific success—without the druggist the miserable trade in harmful patent medicines which are absolutely secret could not exist. Taken all in all we cannot see that we have any call to worry about the profits of the druggists under existing conditions.

The proprietary which has not the merit to stand on will never long continue, and a fight on proprietaries, simply because they belong to that class of remedies, will be unavailing. Nor will the fact that the manufacturer and the dispenser disagree as to who should get the greater profit from the preparation and sale of a product mean much to our profession. Then, again, many of our best and most reliable proprietaries cannot be duplicated in the drug store, for the reason that the scientific process of manufacture requires days, weeks, or sometimes months. We will, as a rule, place greater dependence on the carefulness and nicety of the proprietary manufacturer, who stakes his reputation on the serviceableness of his one or two products, than we ever can on products made by who-can-say whom.

Story of Christian Science.

Some little time since we received an announcement that McClure's Magazine would, in its January issue, devote some space to the Christian Science movement, giving a complete, impartial and true story thereof. We must confess to a well-developed doubt relative to this announcement; we of the medical press have so often been caught napping and have been known to announce matters which definitely purposed our disadvantage. In this case, however, we were mistaken, and we wish that every reader of the Fortnightly would secure the January McClure's, and read this series of articles from its beginning. Georgine Milmine has written the story—for nearly three years she has pursued her study of the subjects. Five other writers of McClure's staff have worked with her to make this story accurate, fair, unbaised and complete. In view of the fact that for some months the press has been full of diverse and conflicting news and statements regarding Mrs. Eddy, it is evident that accurate knowledge concerning her is difficult to obtain in a short time. Consequently McClure's long and thorough preparation of its series will give us for the first time a true history and account of her and her cult.

The Annual Banquet of the Medical Society of City-Hospital Alumni.

The annual banquet of the Hospital Alumni Society was held in Faust's Cabin on the evening of January 3d, and was quite up to the usual reputation of these events from all points of view. Some eighty members of the society were assembled around the "festive board" and partook of one of the dinners which have made Faust's famous, after which came the "feast of reason and flow of soul." The evening's speakers and their subjects were as follows:

Dr. Chas. J. Orr, "The City Hospital Society as a Stimulus to Higher Professional Achievements."

Dr. Louis Rassieur, "The American Student in Foreign Universities."

Dr. Jno. Y. Brown, "The Present City Hospital."

Dr. H. C. Dalton, "The Old City Hospital."

Dr. Wm. Porter, "What the Alumni Society has done for the State Tuberculosis Sanitorium."

President Morfit of the St. Louis Medical Society was present and expressed felicitations from that larger oragnization.

President Kirchner outlined his plans for the work of the society for the year, and announced his committees, which are as follows:

Executive.—W. S. Deutsch, chairman; J. C. Falk, Fred. J. Taussig.

Scientific Communications.—M. Weiner, chairman; Jno. McH. Dean, F. C Simon.

Publication.—W. H. Luedde, chairman; Walter Baumgarten, Hudson Talbott.

Entertainment.—A. G. Schlosstein, chairman.; M. J. Lippe, C. H. Shutt.

Public Health and Municipal Affairs.—R. B. H. Gradwohl, chairman, Frank Hinchey, Howard Carter.

Committees of the St. Louis Medical Society.

At the meeting of the St. Louis Medical Society, held January 12th, President Morfit announced the committees which form the working organization for 1907. The officers and committees for the year are as follows:

OFFICERS.

President, John C. Morfit.

Vice-President, Thomas A. Hopkins.

Recording Secretary, Davis Forster.

Corresponding Secretary, Cyrus E. Burford.

Treasurer, Charles J. Orr.

COMMITTEE ON ETHICS.

Benjamin M. Hypes, chairman; Frank L. Henderson, George Homan.

DELEGATES.

Paul Y. Tupper, J. C. Morfit, Jesse S. Myer, Wm. W. Graves, John Green, Jr., W. H. Stauffer, M. B. Clopton, F. L. Henderson, H. W. Soper.

COMMITTEE APPOINTMENTS FOR 1907.

STANDING COMMITTEES.

Election.—W. W. Graves, chairman; H. E. Ferrel, J. F. Menestrina.

Executive.—Wm. Engelbach, chairman; Louis Rassieur, Fred. J. Taussig.

Publication and Debate.—Otho F. Ball, chairman; Olney A. Ambrose, William E. Sauer.

Library.—Frances L. Bishop, chairman; Arthur C. Kimball, William H. Rush.

Public Health and Legislation.—Henry J. Scherck, chairman; Frank R. Fry, Robert M. Funkhouser.

SPECIAL COMMITTEES.

Finance.—J. H. Amerland, chairman; Jules Brady, William S. Deutsch, F. J. V. Krebs, William Winter.

Building.—A. R. Kieffer, chairman; V.P. Blair, A. W. Flemming, M. W. Hoge, L. S. Luton.

Revision and General Welfare.—John Green, Jr., chairman; M. B. Clopton, Joseph Grindon, B. W. Moore, W. B. Outen.

Business Affairs and Expenditures.—J. R. Lemen, chairman; Llewellyn Williamson, A. S. Barnes, Jr., Amand Ravold, Hudson Talbott.

State Tuberculosis Sanitorium.—William Porter, chairman; Louis H. Behrens, Louis M. Warfield.

Population of the Earth.—The latest authoritative estimate of the population of the earth by continents is as follows: Asia, 850,000,000; Europe, 380,200,000; Africa, 127,000,000; North America, 89,250,000; South America, 36,420,000; Australsia, 4,730,000; polar regions, 300,000. This brings the total of the earth's estimated population up to 1,487,900,000. It is estimated that there are in the world 401,700,000 people who speak the seven principal languages of Europe: English, French, German, Italian, Spanish, Portuguese and Russian. Of this number 111,100,000 or 27.7 per cent of the whole, speak the English language. The German and Russian languages come next in importance, about 75,000,0000 people speaking each of them.

Control of Prostitution at Walla Walla.—A sensation was caused at Walla Walla by a recent order of the city board of health that the fallen women should appear once a week before the health officer for examination, for which the usual consultation fee should be paid, in order to obtain a certificate of good health. The attempt to enforce the order raised consternation among the women affected and stirred the wrath of other physicians, to whom this appeared an unwarranted monopoly for the health officer. The order was modified, therefore, to permit the employment of any physician desired. Whether such a practice will prove any more satisfactory in this than in other cities, where it has been a failure, will be watched with interest by all who are interested in this perplexing problem.

REPORTS ON PROGRESS

Comprising the Regular Contributions of the Fortnightly Department Staff.

OPHTHALMOLOGY.

WALDEMAR FISCHER, M. D.

The Treatment of Incipient Senile Cataract with Subconjunctival Injections of Potassium Iodide.—v. Pflug (Klin. Monatsbl. f. Angenheilk.) induced to experiment with this method of treatment by Scrini. On account of the painfulness of subconjunctival potassium iodide solutions Pflug adds acoin. The conjunctiva is thoroughly anesthetized by instilling two or three drops of a 3% strength solution of cocain into the conjunctival sac. After an interval of three minutes the author inserts a cotton pledget about the size of a pea saturated with cocain, which he places into the lower fornix, in case the injection is to be made here. The pledget remains in place about five minutes when complete anesthesia will have been induced, should the patient be hypersensitive the pledget may be removed and renewed again. The usual method of injection is observed a binocular bandage is applied for three hours. The formula for the solution to be injected is as follows:

Potassium iodide	0.2
Sodium chloride	0.2
Distilled water	10.0

To each gramme of the above solution one drop of a 1% strength acoin solution is added. The injections are made every third or fourth day dionin in substance 0.05 being dusted into the eye during the intervals. The injections are continued for four weeks when they are interrupted for two weeks when a number of injections may be made again. During the treatment the patients are requested not to use their eyes. The author cites a number of satisfactory treated cases, and hopes soon to submit a more extensive list of observations to the profession.

The Duty of the Oculist to Individuals Suffering from Incurable Diseases Leading to Blindness.—A. v. Szily (Klin. Monatsbl. f. Angenheilk., Oct., 1906) emphatically recommends that the patient remain uninformed in regard to the fate which awaits him. He suggests that a sham method of treatment be carried out, that the patient may not lose hope and be rendered extremely miserable, or even attempt his life. The patient should, however, in the author's opinion, be prepared to some extent for the dismal future. The patient is told that it will require a long time to cure the disease, and a still longer period before he may use his eyes again. The study of the script for the blind is then recommended merely as a past time, until the use of the eyes may be resumed, or possibly to jot down notes until vision improves. Theauthor usually quiets all suspicion by asserting that he himself has mastered the script in order to correspond with patients who are not permitted to read.

Congenital Melanosis of the Cornea.—A. Kramer (Centralbl.f Praktische Angenheilk., Feb., 1906) reports a congenital melanosis of the cornea in a woman 63 years of age. The examination of both corneae by means of focal illumination and the assistance of a Hartnacks lens reveals a brown pigmented spindle lying transversely across the pupil in the deeper layers of the cornea. The spindle is about twice the length of its width having its poles directed respectively to the inner and outer canthus. The spindle appears more heavily pigmented at its borders than in the center. Its edges seem irregular on account of being formed by pigment granules. Kruckenberg assumes that the corneal pigmentation is due to a diffusion of pigment from the pupillary membrane which is in contact with the posterior surface of the cornea for a period during development. The condition is extremely rare and should occur in corneae of higher animals; so far, however, it has not been reported.

Prognosis and Therapy of Glaucoma Simplex.—Schleich (Bericht ueber die Ophth., Section d. 78 Versammelung deutscher Naturforscher und Aerzte zu Stuttgart, Sept., 1906) insists that the final results of the operative tretment must receive attention and not the apparent outcome. After carefully tabulating the statistics of the Tuebingen clinic the essayist concludes that the iridectomy is not a certain curative procedure, in fact in some cases it has proved itself to be decidedly injurious to vision, and in others it only hastened the approaching blindness. The local medicinal treatment has scarcely been sufficiently tested, but excellent results have been obtained by its application in the Tuebingen clinic. These encouraging results should lead to more exhaustive experiments in the future.

Gonorrheal Ophthalmia.—Leopold (Munchener Med. Wochenschrift, May, 1906) after extensive study, contends that a 1% strength solution of nitrate of silver is as effective as 2% strength solution (Crede's method) for the prophylaxis of gonorrheal ophthalmia in the new-born. Of the 7,287 infants treated with a 1% strength nitrate of silver solution between 1902 to 1905 there were only five

early infections, i.e., cases in which symptoms prepared before the fifth day; and 13 late infections. The five early cases were attributed to a faulty technique in carrying out the proper prophylacic treatment. The late infections were caused by the mother's soiled hands coming in contact with the child's eyes. Cases of early infection should not occur, while late infections are not so easy to prevent, despite the most rigid prophylactic measures.

Chorio-Vaginal Veins.—Geo. Coats (The Ophthalmic Review, April, 1906) gives an extensive review on the literature of this subject. The variations of these vessels are fully dealt with, and the pathologic anatomy recieves careful consideration. The chorisvaginal veins are large veins which leave the chorioid and enter the nerve and pass backwards close under the pial sheath. They result from enlargement of anastomoses which normally occur in this situation; and this enlargement constitutes in most cases a collateral circulation to compensate for a hindrance to the exit of the blood by the normal vortex veins.

Spasm of the Retinal Artery and Its Relation to Transient Blindness.—R. A. Lundie (The Ophthalmic Record, May, 1906) alludes to the cases in literature, and asserts that but few cases have been examined ophthalmoscopically, chiefly those having been so examined in which the attack was prolonged. The cases observed by Wagenmann, Noyes, Loring, Raynaud and Benson are quoted. The causes given include epilepsy, migraine, malaria and quinine poisoning. The essayist's case occurred in a man 88 years of age in fairly good health. The onset consisted of a sudden loss of vision in the left eye. One-half hour later the upper half of the visual field had some perception, the lower remained blind. The fundus appeared to be normal with the exception of an apparent interruption in the column of blood just beyond the disc for about a disc in length in the upper main branch of the retinal artery. This portion of the vessel appeared to be entirely empty. A few minutes after the administration of a dose of whiskey, a fine thread of blood became visible in the vessel previously bloodless. The lower field was still blind. Within an hour after the sudden onset the constricted portion of the vessel had regained its normal caliber and vision was fully restored.

Never open a prostatic abscess per rectum, no matter how much it bulges; always operate through the perineum.

In operating for perforating gun-shot wounds of the abdomen, find the source of any bleeding first, before attempting to suture any perforation.

If amputations below the knee, insist on active and passive motion in the knee joint at an early date. If this is not done contracture ensues, which makes the application of an artificial limb difficult

In the treatment of hand finger infections, it is very important to release from bandaging as much and as many of the fingers as possible, and as soon as possible. The habit of bandaging up immovably all the fingers, in the treatment of a lesion of some of them, saves the surgeon time but, except in short cases, it often cripples the hand by stiffening the fingers.

Immigration Statistics.—The records of the Immigration Department show that in the past twelve months (1906) there has been an increase of nearly 400,000 in the number of persons landing at this port over the preceding year. There were 119,231 first, 134,386 second, and 944,917 third class passengers reaching this port, making a total of 1,198,434 that entered the country in 1906. Of this number 142,603 were citizens of the United States, and 1,055,831 were aliens.

Her "Kismet."—A fahionable woman had a bit of statuary bearing the inscription "Kismet." A housemaid dusting the room asked her mistress:

"Shure, ma'am, what's the m'anin' of the 'ritin' on the bottom of this?"

"Oh, you mean 'Kismet.' It means 'fate,'" replied the mistress.

Bridget was limping painfully when out with her sweetheart not long afterward, and he asked:

"What's the matter, Bridget?"

"Faith," was the answer, "I have the most terrible corns on me kismet."

Lincoln in the February Century.—Three articles on Lincoln, Col. Silas W. Burt's record of "Lincoln on His Own Storytelling," Col. Clark E. Carr's account of "Why Lincoln Was Not Renominated by Acclamation," and Myrta Lockett Avary's story of "A Lincoln Souvenir in the South," will give a decided Lincoln tone to the February Century. The author of "The Illini," who was one of the delegates to the Republican National Convention of 1864, tells how Lincoln showed his wisdom and greatness in the crisis of the convention, saving the convention and his party, even at the cost of unanimity of renomination.

SOCIETY PROCEEDINGS

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Thirty-second Annual Meeting, held at Hot Springs, Ark., November 6, 7, 8, 1906.

(Continued from page 51.)

ABSTRACTS OF PAPERS.

The Future of the Medical Profession.—Dr. J. Henry Carstens, of Detroit, in this, the presidential address, referred to the early history of medicine, and said that great advances had been made during the last thirty-five years. Men of humble origin, but with the right kind of brains, who had an opportunity to enter the profession, had done much to clear up some of the moot questions. By gradually increasing the requirements only the best minds had been able to enter the practice of medicine. Only men with the best mental caliber should be allowed to practice medicine. The second and third-class brains should take up some other calling. Referring to organizations, he said that as the country was large it was desirable to have larger societies in different parts of the country, but that the American Medical Association should not establish a rule and force certain States to join together in the form of a branch; it should be left to the members to organize any kind of way they desired. If a certain branch in the East or West or the South formed an organization, all right. If they ran over the border into some other branch, what was the difference? We could have a Mississippi Valley Society, a Southern Society, or a New England Society, and a Rocky Mountain Society, and still any member of the American Medical Association should have a right to belong to any or all of them. He was sure that at the next meeting of the American Medical Association this point would be settled. The great men of the medical profession were working unselfishly for the good of the race. The moral tone had been wonderfully elevated. Liars in the medical profession had diminished materially, and with a higher standard he hoped they would soon be eliminated entirely. There were still some liars in the profession, and in his experience there were few among the young members. Some of these liars were of the pious order. They regularly attended church. They were very busy; they could not get there until just when the prayer began; they could only walk half-way down the aisle and stand so that the whole congregation could see them until the prayer was finished. Another of these pious varieties went to church late, walked to the front pew, and dropped down like a bag of flour, with the air of utter exhaustion, the people ever ready to exclaim, "Poor fellow, he works so hard." Another variety of liar was the man who claimed to be a specialist, but who, if he was a surgeon, treated typhoid fever and pneumonia if the patients were wealthy. He would even treat measles and cholera infantum if the grandfather was a millionaire. Physicians were and should be the great teachers of the race; hence they should have broad views of life and a thorough knowledge of all kinds of things. At present they must educate the more intelligent people of the community. But they must themselves be of broad education, and the speaker made an eloquent plea for thorough general knowledge. The days when the medical man only knew something about drugs, or how to treat some diseases, were past. The physician should take an interest in everything that affected the community in which he lived. He should be first and foremost and all the time a physician, but still he should be informed on all kinds of questions. He should thoroughly understand the workings of the inner mind, quickly grasp the weaknesss and the strength of an individual's mentality, and thus be able to shape the course of the individual and of the community.

Migraine.—Dr. C. S. Chamberlin of Cincinnati, said that after a very careful and fairly extended study of the treatment of migraine, which had included the use of a great number of remedies and combinations of remedies recommended by various writers on the subject, as well as those which his own ingenuity had evoked, he had come to the conclusion that Rachford's plan of treatment was the only one which was not injurious to the patient and which could be depended upon for relief in most cases, and for cure in a considerable ratio of chronic cases. This treatment consisted in the daily administration of the following prescription:

Sodii sulphatis (dry)....	30 grains
Sodii salicylatis (from wintergreen)	10 grains
Magnesii sulphatis.....	50 grains
Lithii benzoatis.....	5 grains
Tincturae nucis vomicae.	3 drops
Aquae destillatae.....ad	4 ounces.

This preparation was put up in siphons and charged with carbonic acid. Occasionally Dr. Rachford made some slight variation in the formula, but, as a rule, adhered to that which was here given. As this form of dispensing the prescription was not only very inconvenient, but expensive to a prohibitive degree to most persons, he determined to try

it in the form of a granular effervescent salt, and had a quantity manufactured for experimental purposes. He had dispensed fully one hundred pounds of this granular effervescent salt during the last three years, and was convinced that the prescription in this form was fully as efficient as in the more expensive form of a carbonated solution.

The Danger of Dust as a Cause of Tuberculosis.—Dr. George Homan of St. Louis, contributed a paper on this subject, in which he submitted the following points: (1) That efforts toward the eradication of human tuberculosis will fail which do not take full account of household dust as a factor in the dissemination of that disease; (2) that scientific tests have shown that the seeds of pulmonary tuberculosis, harbored within doors in the dried state, are capable of retaining their effective vitality for prolonged periods of time; (3) that any method or procedure employed in inhabited buildings which causes dust to be disseminated must be considered as tending to spread the seeds of consumption; (4) that hotels, clubs, theaters, office buildings, schools, churches, and business esablishments generally should be required by law to introduce and operate dustless methods of cleaning. This part of their mechanical equipment should be held as necessary as provisions similarly made for warming, ventilation, and for fire protection and fire escape. The employment of dustless methods in private residences is urged as being equally imperative for the control and suppression of all forms of tuberculous disease.

Retroversia-Flexions in Their Relations to Pregnancy.—Dr. Channing W. Barrett of Chicago said the accompanying diseases of retrodisplacement might cause sterility, but this was by no means constant. What might be expected from those cases in which pregnancy took place or in which retrodisplacement followed pregnancy? There was apt to be an increased displacement, with aggravation of symptoms, and then one of four things might occur: (1) The uterus might return to normal position and the symptoms be relieved or disappear; (2) abortion might and frequently did follow; (3) incarceration might take place, causing abortion, retention of urine, sloughing of portions of the bladder, peritonitis, etc.; (4) pregnancy might continue to term, with the uterus still retroflexed, causing only moderate, mild, or almost no symptoms. This condition might become a complication of labor. The treatment to be advised should be based upon the present conception of the value of different methods of treatment for retrodisplacement; of the danger or absence of danger of radical cure; of the tolerance of pregnant women for an operation; of the value of the life of the child, and, lastly, the method of operation. It must not be based upon a conception of these matters fifteen, ten, or even five years ago. If we could make a laparotomy fairly safe; if this danger was only slightly increased in the pregnant woman; if the rights of the child were recognized, and an operation could be performed which prevented the possibility or probability of a return of the displacement after delivery, then would cases of beginning incarceration or threatened abortion be operated upon early. Last-resort surgery in this as in other conditions would be less popular. The writer called attention to the early replacement of the uterus in cases of retroversion, retroflexion, and the holding of the uterus with a pessary, if necessary; to the value of an anesthetic; to the knee-chest position, etc. In cases of beginning incarceration he condemned the practice of producing abortion in the interests of the child, and likewise condemned the method of puncturing through the posterior cul-de-sac in the interests of the mother, saying that the puncture might be so located as to be equivalent to rupture of the uterus into the peritoneal cavity. In the light of our present-day aseptic technique, the tolerance of pregnant women to operation, and our present methods of permanently curing retrodisplacement without creating new pathology, he entered a plea for more early and efficient treatment of these cases. Ventrosuspensio-fixation was condemned. To operate upon these cases when most advantageous to the mother and child, the operation must offer the following safeguards and advantages: (1) It must be safe for the mother; (2) it must decrease the fetal mortality; (3) it must insure or promise a permanent cure for the retrodisplacement. If these conditions were secured, instead of pregnancy being a bar to an operation, it might at times furnish an urgent argument for an operation. The writer briefly reviewed his method of operating for retrodisplacement as giving the above advantages. Two cases were described illustrating the necessity for operation, one of which was a case of extreme incarceration, and one of early pregnancy manifesting symptoms of abortion in which there were adhesions and an ovarian cyst. The paper summed up the writer's position in the following conclusions: (1) retroversio-flexion is a pathological condition worthy of appropriate treatment, operative or non-operative; (2) pregnancy may be the means of cure of retroversio-flexion, but may, on the other hand, seriously complicate the condition; (3) the retrodisplaced pregnant uteru

should be replaced as soon as possible, and, if necessary, held in position by means of a pessary; (4) a retrodisplacement during the early weeks of pregnancy that cannot immediately be replaced should be supervised and efforts made to assist it return to a normal position as growth advances; (5) an irreducible retrodisplaced pregnant uterus that shows beginning signs of intolerance or incarceration should have a radical operation for the retrodisplacement rather than be emptied or punctured; (6) in cases of inevitable abortion, the uterus should be emptied and the retrodisplacement corrected, if possible, the radical operation following later, if necessary; (7) cases of marked incarceration should have the benefit of abdominal section unless aborton is inevitable; (8) cases operated upon should have the radical operation for the retrodisplacement if the conditions are such as to warrant its performance; (9) should a retrodisplacement correct itself, or be corrected during pregnancy without operation, it should be carefully supervised after confinement with a view of permanently correcting the malposition.

Blunt Dissection in Plastic Gynecological Operations —DR. T. J. WATKINS of Chicago, said the advantages usually claimed for blunt dissection with scissors over the method heretofore in use of denuding in strips were, first, that very much time was saved; second, raw surfaces were made which would give firmer union. The operator got down into muscular and connective tissue much better than by denudation; third, there was less hemorrhage.

Pubiotomy and Its Relative Indications.—DR. E. B. MONTGOMERY—(For abstract of this paper see issue of November 26, p. 618.)

Clinical Psychology.—DR. FRANK PARSONS NORBURY of Jacksonville, Ill. (This address appears in full in issue of November 10, p. 590.)

Surgical Principles and Theories.— DR. F. F. LAWRENCE of Columbus, O. (This address appears in full in issue of November 10, p. 597)

Present Operative Necessities for Cure in Tubercular Orchitis.—DR. CHARLES E. BENNETT of Fort Wayne, Ind., in summing up, said: (1) To be sure of a cure, all that is infected with tuberculosis must be removed; (2) primary invasion statistics are so variable that the operator should consider his testicular tuberculosis as primary unless other foci are found that disprove the supposition; (3) he modes of infection are so many that the urgeon should be on his guard constantly. This is especially true in infection during the act of cohabitation; (4) the desexation bugbear should be entirely removed from the patient's mind, and instead hope should be given him for a continuation of his copulative power; (5) injections of paraffin in producing artificial testes are good from a cosmetic standpoint, and good also from the great satisfaction they give the patient. It is entirely devoid of danger when properly done; (6) operations, when indicated, should be immediate, followed by prophylactic and hygienic treatment until the maximum improvement is gained.

The author gave the operative technique used by him in double orchovasectomy, and showed how comparatively easy it was to extract the vas deferens from along its course even down to the ejaculatory duct region. He reported two cases to illustrate the postoperative benefit gained. One of them was injected with paraffin, according to the Gersuny method of small quantities at a time, with frequent sittings. The artificial testes were, from the standpoint of size, location and permanency, all that could be desired.

THE German Dermatologic Society will erect a suitable memorial to the memory of the late Fritz Schaudinn, discoverer of the spirocheta pallida. Five thousand marks have already been subscribed to the project. Besides the memorial the society will dedicate the first volume of its transactions to the memory of the distinguished Teuton.

RAT-CATCHERS TO PROTECT HEALTH IN MANILA.—A few months ago great numbers of plague-infected rats were found in Manila, and since a large body of professional rat-catchers have been at work to protect the city's health. It was evident that the plague rats infected only two sections, and in both of these districts a thorough disinfection was at once undertaken. Every house was systematically cleaned and all the habitual abiding places of the rodents, such as wood piles, were removed.

THE Berlin Tuberculosis Dispensary, established two years ago, has lately issued a report announcing very favorable work accomplished during this period. Five hundred thousand marks have been expended in the performance of its service; 15,661 persons were consulted and examined, 18,644 visits being made to dwelling houses; 2,765 tuberculous patients were helped with their rent, while 804 were consigned to hospitals; 1,000 persons were given homes in the woods and other out-of-door places, and 8,200 dwellings were rendered sanitary.

CLINICAL THERAPEUTICS

A forum of original experience, to which scientific contributions are invited. Responsibility for views promulgated limited to author.

Our Scientific and Commercial Departments.—We have always purposed that all departments of the FORTNIGHTLY should be kept so scientifically clean that there could be no question of our stand in the matter of control of the journal. We have always taken pride in the fact that our pages were open to all that is meritorious and that there was no commercial bias to militate against either contribution or product which deserved presentation. We have never expected that each and every reader of the FORTNIGHTLY would approve of everything which is advertised in the journal, nor have we contemplated that any advertiser would expect us to exclude from our pages original matter, which is part of a series which we are under contract to publish, and that just because it seems to offend his commercial sense. We have endeavored to exclude any definite attacks of either department on the other, and we shall continue to do so. Yet we believe there are few better methods of advertising than through opposition, and we feel that it is usually to the advantage of a product that objections be raised to it, especially if it be so fortunate as to have such merit as will abundantly stand criticism. We also believe that it is short-sighted business policy for an advertiser to take offense at an original article, unless it be a definite attack, and even then there is more than a chance that his best interests might be better served by a different attitude. Still we regret that any offense has been found in either department, and we wish to assure readers, contributors and advertisers of our purpose that neither shall do offense to another where the matter is within our control, and we ask a reasonable attitude from all.

New Director of Mulford Laboratories.—Arthur P. Hitchens, M. D., succeeds J. J. Kinyoun, M.D., as director of the biological laboratories of H. K. Mulford Company. Dr. Hitchens has been connected with the Mulford biological laboratories for the past eight years, during the greater period of that time having had personal charge of the preparation of antitoxins and curative sera. He is well qualified to conduct scientific work connected with the production of antitoxins and biological products. W. F. Elgin, M.D., continues in charge and direction of the Mulford vaccine laboratories. E. D. Reed, M. D., of Ann Arbor, Mich., has been engaged to direct research work, particularly in pharmacology and physioloigcal chemistry.

Hypodermic Anesthesia in Major Surgery.—Much is being written these days about effective major surgery under anesthesia produced by hypodermic injection, and while we cannot speak from personal experience or observation, the important subject deserves attention, for it seems to have come to stay, and the enthusiasm of those who have investigated indicates that in its development it may supersede all other methods. Much of that which has been written has been shrouded in somewhat that is indefinite, and in quoting the following editorial from Clinical Medicine, we regret that the writer did not say how much of each ingredient there is in each tablet, but this we could ascertain had we time before going to press, as it is not a secret: "From all sides come reports attesting the remarkable efficacy of the new method of securing surgical anesthesia with 'hyoscine, morphine and cactin compound, Abbott.' The surgeons are taking it up with something akin to enthusiasm. The writer had recently the opportunity of witnessing three serious operations performed under this anesthesia. One was an appendicitis. This patient had two injections of one tablet each, two hours apart. After the last one the attendant came to report nervously that the respiration had fallen to six per minute! The surgeon got up leisurely and remarked that the patient was about ready for the operation, and without concern proceeded with the work. No nausea, no assistant to see to the anesthetic, no unrest, bronchitis or nephritis, but perfect anesthesia for hours, allowing plenty of time for careful work, with hours of quiet sleep thereatfer. Surely this is pretty close to the ideal. Several physicians have reported similar ideal results from this combination in obstetric cases. Smaller doses, however, are used (half size) and care should be taken not to begin too early. This combination is also the best we possess for false pains and pending miscarriage, especially from excess of fetal ctivity. Other reports indicate that the profession is applying this anesthetic combintion in a wide range of other pointed cases. Several have testified to its superior efficacy in relieving the atrocious pangs of hepatic and renal colic, where it leaves the old morphine-atropine combination hopelessly in the rear. A few doses may also well be used to produce sleep in morphine cases, while the regular dope is being gradually reduced. This will probably prove efficient and safer than hyoscine alone. It is now an established fact that hyoscine, when chemically pure, is not therapeutically identical with scopolamine as some claim. Results unqualified by disprove their assertion. The triumph of this anesthetic is

again a triumph for chemical purity and definiteness of drug application."

The Anemias of Childhood.—The anemias of early life are usually sequels of the acute diseases common to this period. The exanthemata are especially liable to be followed by a depreciation of blood quality, and a protracted convalescence often depends on this one condition alone. Moreover, the frequency with which physical stigmata or infirmities actually date from an attack of measles, scarlet fever, diphtheria or any other similar disease of childhood, can often be properly laid at the door of insufficient or improper care during the very important stage of convalescence from these diseases. It should be recognized that the hematogenic function while exceedingly active in childhood, is yet very susceptible to all inhibitory influences, among which the toxins generated in the course of the acute diseases are most common. When a storm infection of measles, scarlet fever or any of these similar ailments is passed, there must follow a period of reconstruction. I fthe damage has been lights, as a result of a light storm or an unusually strong structure, the reconstructive process places little demand on the resources of the individual. But if the storm has been unusually severe and the structure ill-prepared to meet its fury, the rebuilding process is certain to be long and laborious. Deficiency in quantity of the blood is one of the greatest handicaps at this time, and the clinician should recognize this as one of the most important indications for therapeutic assistance. The action of pepto-mangan (Gude) is always very marked in these cases, and it is interesting to note how rapidly children respond to its upbuilding influence. A marked increase in hemoglobin at once follows its use and the red cells multiply rapidly. With improvement in the blood constituents there is a corresponding increase in the whole bodily tone, and it only takes a few days to carry the average patient safely away from the dangers of a trying period. Peptomangan (Gude) is therefore a very valuable tonic in childhood, and unlike so many of the ordinary hematinics it can be given with impunity to the youngest infant. It has marked alterative properties, and in strumous or marasmic conditions it is especially valuable. It is absorbed rapidly, and is never rejected by even the weakest stomach. In early life its administration is best effected by giving it in milk, and the dose should range from ten drops to two teaspoonfuls, depending, of course, on the age of the patient.

A Sheet Anchor in Pneumonia.—(By S. W. W., Umstot, M.D., Hagerstown, Md.)—Two years ago I began to use antiphlogistine in the treatment of pneumonia, and it has proved my "sheet anchor" ever since. My custom is to make daily applications, and by using it in this way I am able to hold the disease in check. Antiphlogistine reduces the inflammation without reducing the patient's strength, and owing to its many virtues, has strongly been recommended as an adjunct in the treatment of pneumonia. A few cases follow: Mrs. G. Was called January 28th, 1905. An examination proved lobar pneumonia, in the upper lobe of the right lung. I applied hot antiphlogistine and the cotton jacket. Next day the patient was doing well. I renewed the dressing daily for four days when it was discontinued, as the necessity for its use had passed away. The recovery was uneventful. Mr. K. was taken ill April 12th, 1905, with his second attack of double pneumonia. I at once applied antiphlogistine and a cotton jacket, and renewed the dressing daily. In two weeks he was sitting up, and he made an uneventful recovery. Mrs. D., a woman with a tubercular diathesis, was stricken with pneumonia of the right lung December 4th, 1905. Antiphlogistine and the cotton jacket were used as in the preceding cases. I discontinued my calls in twelve days, after a complete cure. Mrs. S. —Was called February 22d, 1906, and found double lobar pneumonia. Applied antiphlogistine, hot, then daily until the eighth day, when the crisis was passed. Antiphlogistine was of inestimable assistance in this case. Mr. A., 45 years old. I first saw the case April 22d, 1906, found a double lobar pneumonia with pleurisy of the left pleura. I at once applied antiphlogistine as hot as could be borne, and used it daily for twelve days. On the sixth day the evening temperature registered 105.8 deg. The temperature dropped by lysis and he made a good, although slow recovery.

THE HORRORS OF COCAINE.— The use of cocaine seems to be spreading. Police authorities have come to regard it as one of the recognized sources of crime. The cocaine fiend seems to have his moral sense destroyed. The morphine devotee is often a man of refined and elevated thought, with delicate perceptions, and with a keen sense of honor and obligations except that he will always lie and deceive to get possession of his needed drug. In his sober moments the alcohol fiend is often a man of conspicuous honor; the cocaine fiend seems different. It seems that cocaine directly stimulates to evil passions and evil deeds.

THE MEDICAL FORTNIGHTLY

A Cosmopolitan Biweekly for the General Practitioner

The Medical Fortnightly is devoted to the progress of the Practice and Science of Medicine and Surgery. Its aim is to present topics of interest and importance to physicians, and to this end, in addition to a well-selected corps of Department Editors, it has secured correspondents in the leading medical centers of Europe and America. Contributions of a scientific nature, and original in character, solicited. News of Societies, and of interesting medical topics, cordially invited.

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MEDICAL MISCELLANY

IN the good old times, when oil was used in lighthouses, a 6,000 candle power lamp was considered immense. The latest electric lighthouse built in France (at Havre), will have the power of 2,500,000 candles.

DURING the recent Congress of Leprosy held at Buenos Ayres it was stated that in the province of Cordoba alone there were sixty cases of leprosy, forty-two of which were in the town of Cordoba itself. The theory that the mosquito is a transmitting agent of the disease was advanced.

THE American Journal of Dermatology and Genito-Urinary Diseases commences the new year in a new form and dress and one which is a vast improvement. We would congratulate Editor Martin on the scientific excellence of the number and on its get up, the contributors to it indicate that the journal has the active support of the foremost of the world's dermatologists, syphilographers and genito-urinary surgeons.

THE World's Fair of 1909 will be held in Seattle and will be known as the Alaska-Yukon-Pacific Exposition to exploit the north land and oriental trade.

PURIFICATION OF SEWAGE.—A valuable contribution to the literature on the disposal and purification of sewage has just been issued by the United States Geological Survey as Water-Supply and Irrigation Paper No. 185. Investigations on the purification of Boston sewage with a history of the sewage-disposal problem, by C. E. A. Winslow and E. B. Phelps. The volume of sewage discharged by modern communities is so large and the character of all kinds of sewage is always so objectionable that the so-called sewage disposal problem becomes, from the economic as well as the sanitary point of view, one of the most serious with which American cities have to deal. It is of vital importance to every community to secure such a disposal of obnoxious sewage as will avoid the creation of any insanitary focus or foci in the environment, or any infringement of the laws of hygiene and sanitation. The investigations described in this publication were made at the Sanitary Research Laboratory and Sewage Experiment Station of the Massachusetts Institute of Technology under the direction of Prof. William T. Sedgwick. The station at which the work was carried on is situated on the line of the main trunk sewer of the south Metropolitan district of Boston at a point where it contains the sewage of about half a million people. At this station pumps were installed and tanks were constructed for tests of the various methods of sewage purification. The results of this work and the practical conclusions that have been drawn are given in Water Supply Paper No. 185, which may be obtained on application to the director of the United States Geological Survey, Washington, D. C. These results are by no means applicable merely to large cities, but contain lessons of practical value to all communities having to deal with the ever present sewage disposal problem. The description of the experiments is preceded by a careful and elaborate historical review of the whole sewage disposal problem from its origin in the wide adoption of the water carriage system up to the present time, when that system has become practically universal. This interesting review cannot fail to be of the highest value to expert engineers, sewage commisioners, and cities all over the United States, especially to those numerous small communities that are confronted perhaps for the first time, with a problem that means so much for the health as well as the finances of the citizens.